

**Amendments to the Specification:**

On page 8 and concluding on page 9, please replace the paragraph beginning at line 13 (fourth full paragraph) with the following amended paragraph:

In the input current waveform 30, the fall time 30c is set so as to make the fall time 31c of the optical output waveform 31 ~~enough short~~ short enough while the rise time 30a is set so as to make the relaxation oscillation time 31b of the optical output waveform 31 not influential on the eye pattern waveform. Accordingly, the fall time 30c and rise time 30a are set in such a manner that the fall time 30c is shorter than the rise time 30a and “the rate of change in ~~rise time~~ fall time”/“the rate of change in ~~fall time~~ rise time” becomes equal to or greater than 1.3. The overshoot of the input current waveform 30 may be set so as to make the average voltage of the optical output waveform 31 during the relaxation oscillation time 31b almost equal to the amplitude. For example, a 10G bps directly modulated optical module could conceivably be configured by setting “~~rise time~~”/“~~fall time~~” “fall time”/“rise time” in the definition of 20 to 80% to “~~fall time~~ rise time”  $\square \frac{15 \times 10^{-12} \text{ s}}{15 \times 10^{-12} \text{ s}} \geq 15 \times 10^{-12} \text{ s}$  and (“~~rise time~~ fall time” – “~~fall time~~ rise time”)  $\square \frac{14 \times 10^{-12} \text{ s}}{14 \times 10^{-12} \text{ s}} \geq 14 \times 10^{-12} \text{ s}$  and by setting the overshoot of the input current waveform 30 so as to make the average voltage of the optical output waveform 30 during the relaxation oscillation time 31b almost equal to the amplitude.